



Cultivation Notes

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Wild or Sundial Lupine

Lupinus perennis L.

A New England Native Plant

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Family FABACEAE

There is no prize so rare as a pure blue in nature, and blue flowers are no exception. Yellows and whites are abundant, as are the many pinks and violet hues. The most striking blue of all of the eastern wildflowers is the Wild Lupine. Not only is the color brilliant, but the size of the flower raceme is substantial and the display is highly ornamental. A June walk through dry sandy pine barren or sandy prairie can be rewarded by the discovery of a population of the clear blue to blue-purple pea-like flowers held aloft on narrow 1 to 2 foot spikes. Texts suggest that pink and white forms exist, but these are certainly rare and local.

In his journal under the date of June 8th, Thoreau writes: "The lupine is now in its glory. . . . It paints a whole hillside with its blue, making such a field (if not meadow) as Proserpine might have wandered in. Its leaf was made to be covered with dew-drops. I am quite excited by this prospect of blue flowers in clumps, with narrow intervals, such a profusion of the heavenly, the Elysian color, as if these were the Elysian fields. . . . That is the value of the lupine. The earth is blued with it."

Few of us can recall such a dominance of the species. The rewards for my June sojourns have been more modest, but every bit as precious. The modern day naturalist has limited opportunity to enjoy the robust colonies of Thoreau's day. Habitat loss and the suppression of fires and the near cessation of timber harvest in the northern pine barrens have reduced the natural abundance of this beautiful flower.

The Wild Lupine is the only species of the genus native to eastern North America. Most gardeners are familiar with the Russell Lupines. These are the more vigorous taller lupines that come in all the colors of the rainbow. An Englishman, George Russell, began selecting and breeding lupines in 1911 using *Lupinus polyphyllus*, *L. arboreus* and *L. nanus*—all western North American species—and *Lupinus mutabilis* from South America. The resulting crosses are a standard in the modern perennial border. The lupines that proliferate along the coast of Maine and are celebrated during the Vermont Lupine festivals are the naturalized escapees from the cultivation of the Russell Hybrids. The beauty of these hybrid expanses masks a sad tale in the natural history of the eastern North American forest.

The delicate Karner Blue Butterfly (*Lycaeides melissa samuculis*) is a small native butterfly whose iridescent blue color is reminiscent of an Indigo Bunting. This rare beauty is declining rapidly due to its unique diet, which is limited to the Wild Lupine (*Lupinus perennis*). The loss of habitat suitable to Wild Lupine is the primary cause. A more subtle cause in the decline of the Karner Blue has to do with the willingness of the Wild Lupine to hybridize freely with the escaped western North American lupines. The resulting progeny are an unsuitable foodstuff for the Karner Blue Butterfly. As the pure native Wild Lupine stands are replaced with the hybrid products of the human induced evolutionary change, this tiny sapphire butterfly is unable to make the seemingly short but critical evolutionary leap.



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Lupinus perennis L. Wild Lupine; Sundial-lupine

This species thrives in the rigors of a well drained acidic soil or even poor sandy soil. Soils that are too moist, alkaline, or fertile can result in the premature defoliation and death of the root system to various fungal ailments. Because it is prone to aphids and early defoliation, this native a poor choice in a formal perennial border.

For those who have sandy meadows or properties that include pine barren habitats, sowing this species directly into sunny openings or edges, as part of a wild meadow mix, can yield beautiful results. The New England Wildflowers Society sells a Dryland Meadow Mix which contains Wild Lupine (*Lupinus perennis*), Butterfly Weed (*Aesclepias tuberosa*), Narrow Coneflower (*Echinacea angustifolia*), Northern Dropseed (*Sporobolus heterolepus*) and dozen more species. Contact the New England Wild Flower Society at WWW.newfs.org.

Propagation from seed:

Seedling propagation is the best and most practical way to propagate. Each of the 1.5 to 2 inch long pods usually contains four or five seeds. Good results can be obtained by collecting the seed when it is barely ripe and sowing it directly into a very well drained soil mix that contains some soil from the parent plants. The soil from the parent will contain some of the beneficial nitrogen-fixing bacteria necessary to this member of the legume family. Seedlings will transplant well when young (two sets of leaves) but become increasingly more difficult to move as the plants mature. Older plants have deep storage root systems that would require an inordinately large soil ball to transplant and usually don't move well. This fact should discourage would-be wild collectors.

Ripe seeds can also be sown. They germinates best when the dry seeds are pre-soaked in tepid water for 24 hours. Sow directly into small containers for best transplant success. Plants will flower in the second year.

RIWPS Policy:

*Never dig plants in the wild or without the written permission of the landowner.
Take seeds sparingly.*

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Illustration from Mrs. W.S. Dana's *How to Know the Wildflowers*. Dover Publications, NY, NY



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